UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,051	10/07/2003	Simon Gibson	AOL.034A	6023

20995 7590 03/16/2009

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
STRANGE, AARON N	

ART UNIT	PAPER NUMBER
2453	

NOTIFICATION DATE	DELIVERY MODE
03/16/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/681,051	GIBSON ET AL.	
	Examiner	Art Unit	
	AARON STRANGE	2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,14-28 and 30-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,14-28 and 30-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Examiner would like to note that the present application has been reassigned to a new Examiner.

2. In the interest of expedited prosecution, the Examiner would like to recommend conducting an interview prior to filing a response to the present Office action. The Examiner feels that an interview would help foster a mutual understanding of the respective positions of Applicant and the Examiner, and assist in the identification of allowable subject matter and/or issues for appeal. If Applicant agrees that an interview would be beneficial, he/she is encouraged to contact the Examiner to schedule one.

Response to Arguments

3. Applicant's arguments with respect to claims 1-12, 14-28 and 30-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 31-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

6. Claim 31 is directed to a "system" comprising a "server application" and a "localization database". The claims fail to limit any of these elements to hardware and fail to contain any hardware elements. Software *per se* is non-statutory. The Examiner recommends amending the claim to require at least some hardware elements.

7. All claims not individually rejected are rejected by virtue of their dependency from the above claims and their failure to remedy the above noted deficiencies.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-4, 6, 7, 10-12, 14-16, 17-20, 22, 23, 26-28, 30-37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zisapel et al. (US 6,665,702) in view of Donker et al. (US 7,219,162).

10. With regard to claim 1, Zisapel discloses a method comprising the steps of:

providing a server application at a first server (LB1), and a client application at a client terminal (client 26), the first web server comprising a server other than a server

corresponding to the content store and the network servers corresponding to the mirror instances (content is stored on servers in mirrored server farms 10 and 12) (fig. 1; col. 13, ll. 3-6), wherein the client terminal is connected to the first web server by a first connection (client may communicate with LB1 via the FTP/HTTP connection)(col. 14, ll. 22-25), wherein the client terminal is connected to the network through the first server (client requests pass through LB1)(col. 14, ll. 22-25), and wherein the server application and the client application communicate to provide localization decisions without user interaction (preferred mirrors are selected without user interaction)(col. 14, ll. 8-25);

determining localization information for each mirrored instance of the content store, wherein the localization information comprises the number of hops and latency from each mirrored instance of the content store to any of the first server and the. client terminal (network proximity of each mirrored instance is determined, which includes latency and hop count information)(col. 14, ll. 31-46);

storing the determined localization information in a localization database (proximity information is stored in the proximity table)(col. 15, ll. 24-25);

receiving a request at the first server over the first connection from a user at the client terminal, the request corresponding to mirrored content (client requests content from LB1)(col. 14, ll. 23-27);

querying the localization database and applying a set of rules to the stored localization information through the server application at the first server to determine a preferred mirror instance for the client terminal, the rules comprising a function of the stored hop information and the stored latency information between each of the mirror

instances and the client terminal (closest server is selected based on the latency and hop count information)(col. 14, l. 41 to col. 15, l. 25).

Zisapel fails to specifically disclose that the first server (LB1) is a web server or that the server provides links to localized content by generating a web page that includes a selectable link to the determined preferred mirror instance and transmitting the web page to the client.

Donker teaches providing a client with a web page including selectable links to alternative mirror servers storing a requested content object and also including a link to a determined preferred mirror server (col. 7, l. 61 to col. 8, l. 46). This would have been an advantageous addition to the system disclosed by Zisapel since it would have allowed the user to select a preferred mirror site to obtain a particular content item, or to select a non-preferred mirror link if desired, allowing the user to choose which server they wish to access.

Therefore, it would have been obvious to one of ordinary skill in the art to provide the client with a web page containing a link to a determined preferred mirror server and additional mirror servers to allow the user to choose which mirror server to access to obtain a particular content item.

11. With regard to claim 2, Donker further discloses automatically directing the user to the local mirror instance when the user selects the selectable localized link within the dynamically generated web page (col. 8, ll. 43-50).

12. With regard to claim 3, Zisapel further discloses that the function of the stored hop information and the stored latency information between each of the mirror instances and the client terminal comprises a determination of a mirror instance having the lowest number of hops (col. 14, ll. 41-46).

13. With regard to claim 4, while the system disclosed by Zisapel and Donker shows substantial features of the claimed invention (discussed above), it fails to disclose that the preferred mirror is the mirror having the lowest number of hops, considering the latency only when the number of hops is the same.

Zisapel teaches that the "network proximity" is determined by considering various attributes such as latency, the number of hops, and various other factors (col. 14, ll. 4—46). One of ordinary skill in the art would have recognized that these factors could have been considered in any combination preferred by the user, and that the various algorithms for determining a preferred mirror would have merely been predictable variations of each other.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any particular algorithm for locating the user's preferred mirror, including one that selects the mirror having the lowest hop count and breaking ties using latency.

14. With regard to claim 6, Zisapel further discloses that the localization information further comprises mirror server load information (col. 15, ll. 15-25).

15. With regard to claim 7, Zisapel further discloses that the localization information further comprises mirror server operation information (availability)(col. 15, ll. 15-25).

16. With regard to claim 10, Zisapel further discloses the first web server is associated with a service provider (each load balancer is associated with a server farm)(col. 13, ll. 3-12).

17. With regard to claim 11, Zisapel further discloses that the localization information is stored at the first web server (col. 15, ll. 8-25).

18. With regard to claim 12, Donker further discloses that the request comprises corresponds to a web page (col. 8, ll. 7-20).

19. With regard to claim 14, Zisapel further discloses that the preferred mirror is further determined from the request IP address of the client terminal (site closest to the client is selected based on the subnet portion of the client's IP)(col. 15, ll. 26-32).

20. With regard to claim 15, Zisapel further discloses that the preferred mirror is further determined from the request IP network of the user (site closest to the client is selected based on the subnet portion of the client's IP)(col. 15, ll. 26-32).

21. With regard to claim 16, Donker further discloses that the selectable localized link comprises an HTTP link (list of alternative sites contains HTTP links)(col. 8, ll. 33-50).

22. Claims 17-20, 22, 23, 26-28, 30-34, 36, 37 and 42 are rejected under the same rationale as claims 1-4, 6, 7, 10-12 and 14-16, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are explicitly or inherently taught by the above cited art.

23. With regard to claim 35, Zisapel further discloses that the unique address comprises a terminal IP address (client has an IP address)(col. 13, ll. 25-29).

24. With regard to claim 41, Zisapel further discloses that the localization information further comprises triangulation tests and performance tests of the networks (col. 13, ll. 19-47).

25. Claims 5, 8, 9, 21, 24, 25, 38 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Zisapel et al. (US 6,665,702) in view of Donker et al. (US 7,219,162) further in view of Kirkby et al. (US 6,671,285).

26. With regard to claims 5, 8 and 9, while the system disclosed by Zisapel and Donker shows substantial features of the claimed invention (discussed above), it fails to disclose that the localization information comprises information about costs associated

with transmitting the mirrored content to the client, such as cost information associated with each network segment.

Kirkby teaches a method of determining a preferred route between two entities in a network by storing and comparing cost information associated with each network segment to locate the lowest cost route (col. 6, ll. 20-29). This would have been an advantageous addition to the system disclosed by Zisapel and Donker since it would have allowed cost information to be considered when determining the preferred mirror for a particular content item.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to compare cost information associated with each network segment along a path to each mirror location to locate the lowest cost mirror associated with a particular content item.

27. Claims 21, 24, 25, 38 and 39 are rejected under the same rationale as claims 5, 8 and 9, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are explicitly or inherently taught by the above cited art.

28. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zisapel et al. (US 6,665,702) in view of Donker et al. (US 7,219,162) further in voew of Official Notice.

29. With regard to claim 40, Zisapel and Donker fail to specifically disclose that the localization information comprises a map of all IP address space within a global routing table.

The Examiner takes Official Notice that the use of global routing tables was old and well known in the art at the time the invention was made. One of ordinary skill in the art would have recognized that a global routing table would have been a predictable variation of the triangulation-based routing system used by Zisapel.

Therefore, it would have been obvious to store the localization information in a global routing table having a map of all IP address space, since it would have allowed the servers to make load balancing decisions without running tests specific to each client, reducing the time necessary to make a routing decision.

Conclusion

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON STRANGE whose telephone number is (571)272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Strange/
Examiner, Art Unit 2453